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Engineering

Volume XXI
No. . . . 2 1

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OFFICIAL PROCEEDINGS
Meeting of Febuary, 1922.

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OCTOBER
1913

Canadian
Railway
Club
MONTREAL



CONTENTS

Report of Febuary Meeting and paper and discussion
on
"Education in its Relation to Efficiency"
also
Report of Annual Banquet

TUCO PRODUCTS CORPORATION.

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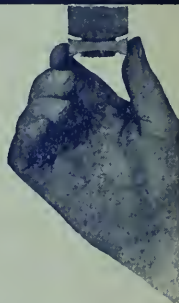
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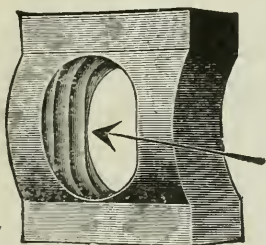
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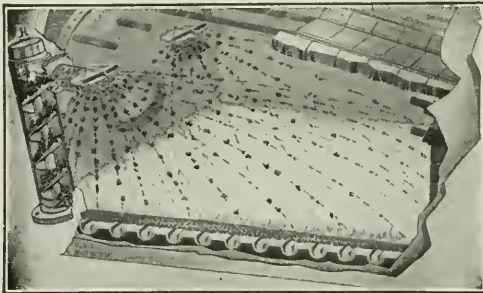
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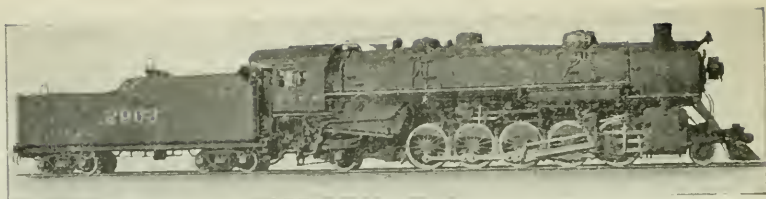
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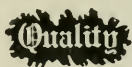
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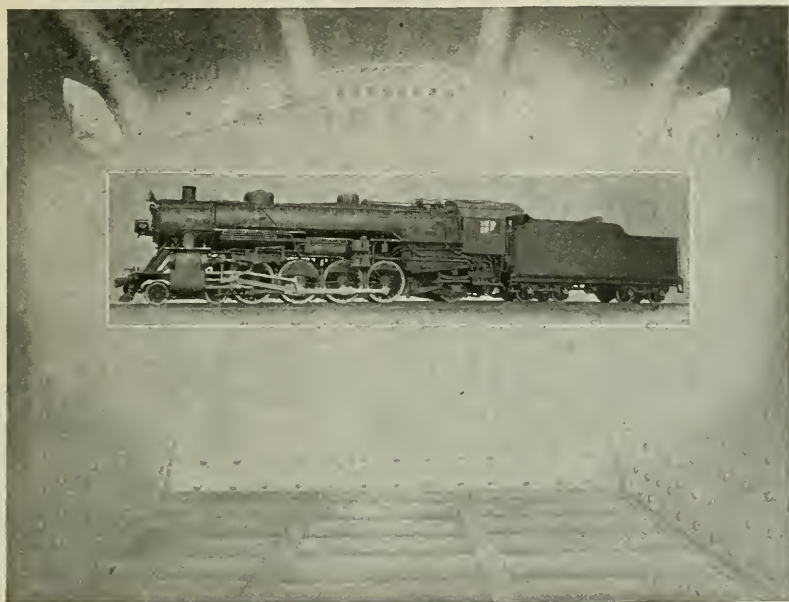
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Canadian National Railways,
Toronto, 1917-18

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Mr. J. HENDRY,
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Montreal

PROCEEDINGS OF THE CANADIAN RAILWAY CLUB

Windsor Hotel, Montreal,
February 14th, 1922.

Chairman (Mr. A. Crumpton).

Gentlemen, will you kindly sign the attendance cards which you will find on the chairs, so that the Secretary will have a correct record.

We will dispense with the reading of the minutes of our January meeting, as they have been printed and mailed to all members.

Chairman:

The Secretary will now read the list of applications for membership.

MEMBERS PRESENT:

Crumpton, A.	Ferguson, J. P.	Jamieson, C. S.
Allan, T. A.	Fielding, W. G.	Lathrop, C. B.
Bannerman, W. H.	Ginty, J. J.	Lowe, W. S.
Benard, J. B. H.	Guest, O.	Martin, T.
Black, R. H.	Hamer, T. M.	Matheson, A.
Branston, W.	Hampshire, A.	Menard, J. P.
Branscombe, F. W.	Hanson, L. P.	Milnes, E.
Bryson, W.	Hamm, W. C.	Misson, R. C.
Buckland, A. W.	Hanson, L. P.	Monks, T. H.
Cameron, H. D.	Harragin, H. C.	Montagne, J. R.
Camp, W. J.	Harrison, E. V.	McCann, F.
Campbell, A. J.	Harrison, J.	McDonald, A.
Chown, T. C.	Harrison, W.	McEwan, W. H.
Chuker, G.	Hulatt, W.	Naylor, H. R.
Clark, H. A.	Holland, F. E.	Nelson, B.
Cookman, R. C.	Horn, B. T.	Nye, H. F.
Crockett, W. B.	Hunter, W.	Palmer, H. A.
Crawford, R.	Inns, G. A.	Palmer, J. E.
Crutchlow, G.	Jackson, J. R.	Peat, A. N.
David, C. H.	James, H. H.	Pierpoint, F. H.
Dridles, L. G.	Jeffries, G.	Playfair, J.
Dutton, H. R.	Kelly, E. J.	Pope, A.
Eisele, J. P. V.	Lachapelle, J. D.	Powell, J.

Prouse, W.	Sleigh, T.	Van Dewall, L. J.
Redmond, W.	Spence, W.	Watson, T.
Robertson, A.	Stanger, R.	Wilson, G. M.
Ross, J. D.	Steeves, W.	Winship, R. B.
Sams, A.	Symmes, H. F.	Wood, R. J. H.
Shaw, J. H.	Taylor, S. G.	Wyer, F. H.
Shortley, B. F.	Thorburn, C. D.	Booth, W. A.
Simpson, J. A., Sr.	Thorn, A. C.	and others.
Simpson, J. A., Jr.	Turner, F. C.	

Chairman:—

The Secretary will read the list of applications for membership. These applications have been passed on by your Executive Committee.

NEW MEMBERS.

Emsley, T. E., Asst. Supt. C.P.R., Montreal.
 Gordon, W. G., Ry. & Traction Engineer, Can. Gen. Elec., Toronto.
 Holland, S. C., Sales Manager, The Robt. Mitchell Co., Montreal.
 Jacques, A., Loco. Engineer, G.T.R., Montreal.
 Keough, E., Asst. Eng. Maintenance of Way, C.P.R., Montreal.
 Lewis, D. M., Lewis Draft Appliance Co., Chicago, Ill.
 Larmonth, J. H., Consulting Engineer, 604 McGill Bldg., Montreal.
 Mitchell, L. S., V. P., & Man. Director., The Robt. Mitchell Co., Montreal.
 McLean, W. J., Trainmaster, C.P.R., Medicine Hat, Alta.
 Palmer, E. B., Supt Bldgs., Prot. School Board Comrs., Montreal.
 Richardson, S., Patternmaker, G.T.R., Montreal.
 Shean, W. E., Ames Holden McCready Co., Montreal.
 Singleton, H., Draftsman, G.T.R., Montreal.

Chairman:

Those gentlemen whose names you have heard were passed on by the Executive and are now members of the Club.

We are fortunate in having with us to-night, a gentleman from Toronto, who is connected with the Alexander-Hamilton-Institute, viz., Mr. A. J. Felton, who is going to address us on "Education in its Relation to Efficiency." Mr. Felton has given us some remarks which will be incorporated in the proceedings, but has requested that he may be a free lance on this subject of Education to-night, so that he will use his own discretion as to what subjects he brings up. I have much pleasure in introducing Mr. Felton.
 Mr. A. J. Felton:

A straight line is still the shortest distance between

two points. A law in mathematics as true to-day as when it was first discovered. And one, which I shall endeavor to prove, is as equally true and as vitally important when considered in its relation to training men for business.

Step aside for a moment and look at your school system, that you men all know about, and examine where you stand at any given moment. You attend the grade school until you are 14—if you are fortunate enough—the High School until you are 18, and the College or University until you are 22. As a matter of fact, many of you reach the age of 24 or 25 before leaving school. And then—what? You strike out to find your place in business. Whether you were fortunate enough to graduate from a college, or through your own choice left school, or whether force of circumstances took you into the business world, it makes no difference as far as you are concerned to-night. You must ever continue to be a student. You must follow some systematic course of study. For in the world of business, no diplomas are granted—no degrees conferred. So that the only tangible evidence you have, as to both your standing and progress in business, is the position you hold at any given time. Let me further add that this so called “position” is not something to be “held” or “filled.” It is more specifically a certain measure or division of responsibility placed upon your shoulders, which you may hold in trust, only as long as you discharge the duties connected therewith to the satisfaction of your superior officers, and through them, the corporation as a whole.

When you stepped into the business world, what did you find? You found it was the day of the giant Corporation. The old partnership system in business is rapidly disappearing. It is not flexible enough in its functioning to meet the demands of modern business. Only recently one of Europe's greatest financiers in an interview stated: “I will not have partners. They need constant watching. I want Business Associates. That is another thing.” Moreover, the days of the individual, as such in business, without competent associates, are numbered. If he has an idea worth while putting over, and he creates it in Montreal, its value is only apparent if he can duplicate it in Vancouver, Winnipeg, Chicago, or New York.

I want to mention an article you men have perhaps seen within the last few weeks, which is rather a romance. You have all noticed a little sign “Eskimo pie 10c.” I do

not know how many of you are aware that this was created less than ninety days ago by two young men out in Iowa, who only had the sum of \$27.00 between them, and the discovery was an accident. They tried to get some man in Des Moines to back them to make 50 dozen. He asked them if they had any money, and they replied that they had not. "Well," he said, "I don't do business on credit. Go across the street and let those fellows make them for you." They saw the other man, who was enterprising enough to say, "Well, boys, I will make them and when you sell them bring me the money and I will give you more credit." They did and it will surprise you to know that inside of a month one of the largest brewery owners in the United States offered them a million dollars for their rights. To his surprise he was refused. It may also interest you to know that a certain concern in Montreal offered these young men \$250,000 and a marked cheque for the Canadian rights, and they also refused. Their royalties at this moment are five cents per dozen. The romances in business are not all over yet. This is only one of the many that have occurred in the past, and will occur in the future.

If you are to find yourselves, gentlemen; somewhere along the road in modern business, it will have to be through training. Experience of itself takes too long. I want to step aside for a moment and ask you—those who are married and those who are not—if it is not possible for you to spend one evening a week at home to study either the Bible or Sanscrit, Law, Engineering, Surgery or any other subject. On that one evening to sit down and devote it to concentrated study. Don't let anyone disturb you during that period. The result will be—not so much the facts you have acquired that evening—but the will to accomplish something worth while. That one evening a week for one, two, or three years will lift you above the dead level you have been working on. Go to the other side of it, gentlemen.

It is only the great Corporation that can afford to pay salaries of Ten Thousand to One Hundred Thousand Dollars a year, if you can show that you are worth it. That amount cannot be paid—much less be worth it—for your services in a grocery store at a flag station. But if the modern corporation holds out the greatest possibilities for your future business career, it also has in it the danger that you may become lost in the mass—one of ten thousand men

whose work is becoming so highly specialized that a very large part of it is now routine. So as I said a moment ago, you should follow some systematic course of study.

What are the greatest essentials in a sound business education? There is an axiom in Euclid that the whole is greater than any of its parts. And this applied to business means that you must acquire a knowledge of the **four great fundamentals**—Production, Marketing, Financing, and Accounting. And based on this a knowledge of all the important facts having a direct or indirect bearing on a specific problem at any given time. For without these facts before you sound business judgment cannot be rendered. Again, you are forced by the law governing the Corporation in its activities to go up through some one of these departments, but get it very clear, if you go up through only one of these, your chances for becoming chief executive are exceedingly remote. Not only can you acquire through training the view points of the man in the other departments, but you can acquire the vision to see the problems which confront the Corporation as a whole. Unless you have that possibility of coming up through a department and at the same time acquiring training through systematic study of the other departments, there is not a change for you. If you doubt that, just check through the list of Presidents of large Corporations, Railway, Steel, Electric and other enterprises, and you will see that the Presidents and General Managers are every one of them all-round men, and that they have been for a good many years past in these four fields.

Production: Whether producing an idea or producing a service or an article of commerce, what goes into play once you have your facts? What are the things you have got to have at your grasp to make you a marked man—and that is what you have got to play for—to become that marked man in the eyes of your superior officer? I will tell you. Firstly, with all the facts before you, Judgment. Some of you men here no doubt have recently read Lord Beaverbrook's book "Success." You may not agree with all he says, but you will notice that he rounds out the chapters and pins his whole faith in a study of Judgment. I say you may not agree with him, but he certainly drives it home—Judgment, based on all the facts.

What next, gentlemen? Vision. Vision is the power to see a given problem in all its intricate relations, all its

possible aspects. If there is any choice in the matter, Vision will certainly be entitled to very nearly first place. I will take an instance in connection with railroading, a thing which you men know about. A certain Corporation a few years ago gave an order for several thousand box cars early in the year. June came and with it a drought in the West. The President, Vice-President and other important officials were wondering what they should do. Should they proceed with the construction or not. A messenger stepped into the office, a telegram was handed to the President, who read it aloud. It read: "Rain general over Southern Manitoba." He took a glance around the table and said, "Gentlemen, we will proceed with the box car order. The meeting is over for to-day." He did not hesitate a moment. Judgment came into play and vision of what would take place following the rain.

From that meeting I want you to step over to the shops and observe the workmen for a moment. They were totally ignorant of what had taken place in the President's room, and the manufacture of the box cars meant so much work at so much per day to them. They could not see the Executive problem involved, and, gentlemen, whether you like it or not, you there have the difference between the viewpoints of the two lots of men. Until these men can arrive at the Executive's angle and see things as the Executive has to see them, they cannot hope to command an executive salary. Vision must still bring you the power to look back and then to turn round and look forward. I want to give you one more instance on the railroad — the Union Pacific. An organizer — a financial genius — Harriman, sat in control at the time the particular instance I am about to give you took place. He intended that the railroad should be built straight through the Great Salt Lake, and thereby cut off 47 miles of a detour, from Ogden around the North Shore. The engineers, every last one of them, said it could not be done. Harriman came back with the statement: "But it can and shall be done." And the answer is that Harriman, seeing the problems of the corporation as a whole—had acquired Vision. The engineers, coming up through one department only, were deficient in business courage. I once heard a Railway Executive complain that so frequently when he submitted a problem to his subordinates their first thought was not — "how could it be done?" But instead they presented arguments em-

phasizing the difficulties to be encountered. Thereby, so he said—"always putting the cart before the horse." This was again one of the results of training to which I have already referred—that of a too narrow specialization. For if any man comes up in an organization with a working knowledge of only one department, without acquiring a broad business training in addition thereto—his chances of becoming a first rank executive are very remote. To verify this statement, you need only check over the lists of Presidents and General Managers of great corporations during the past 25 years in this country, the States and abroad.

Moreover, Vision—the power to see a problem in all its intricate relationships, can no where be better illustrated than in the present state of Canada's immigration problem. It has been a pet subject of discussion for the operating officials of railroad companies, steamship lines and Chambers of Commerce during the past fifty years. Only recently I saw an imposing array of well-known names, organized into an apparently great company to deal with this problem on a large scale. But so far, I have yet to see where these organizations have taken into consideration the fundamental things which vision would supply, namely—to bring 10,000 immigrants from Europe and dump them at some port indiscriminately is one thing—to transport them to some cities in the interior is still the same thing. Vision should show these men that immigration is primarily a problem in human transplantation, if I may use that term. In other words, to bring these same 10,000 men with their families and locate them in previously built homes with facilities for working and living in nearby groups, would immediately create a community of producers as well as consumers. You would also immediately have a nucleus for Church, School, Society and training in Citizenship.

Contrast this with the thousands of men who came over as laborers just to earn a certain amount of money, with their family ties still in Europe, intent upon getting back there at the first favorable opportunity, and you have both sides of the picture.

You will note that I have dealt with Judgment first and Vision second. I wish now to consider the quality known as Decision. For while a man may form a sound judgment, based on all the available facts, and through vision see all the possibilities in any given situation, these

of themselves would still mean nothing—they must be cemented together by decision. And so it is that one of the most **important** qualities in a man is the power to decide. You have often heard it said that the man who hesitates in business is lost. As a matter of fact, I should like to add here that what really counts is what I may call “sustained decision.”

You have all heard of Rip Van Winkle. I have no doubt that during the twenty years Rip was asleep on the mountain he promised himself many times in his dreams that he would drink no more cider. You recall what happened. Not only did he drink twelve glasses, one after another, but when it came to the thirteenth he said, “Well, I will not count this time.” And James, commenting on it in his *Psychology*, says,—Well, he may not count it, and a kind Heaven may not count it, but deep down in the marrow of his bones Nature is storing it up for him to be used against him when the next temptation comes.”

So that Decision within itself means nothing! It must be followed by action—doing the thing that you know to be necessary whether you like it or not, and doing it now rather than “Some Sweet Day.”

Action—A powerful engine on the side track, if you please. Vision conceived it, Judgment built it, Decision sent it to the point where it would be most useful, but still having only potential value until it is sent out on the main line to pull a heavy load.

Gentleman,—in the last analysis, when you come to examine the careers of most men who are failures, on the one hand, and successes on the other, you will find it summed up in that one word—ACTION. Defeat always sits in the Arm Chair of Inaction. Success is ever on its feet.

Chairman:

Gentlemen, the paper is open for discussion. I did not think we were going to hear about Eskimo pies to-night. I would like to be in that business myself. Let us have a full and frank discussion on the subject presented.

Mr. W. A. Booth (Secretary):

Mr. President and Gentlemen.—I am sure we all appreciate what Mr. Felton has said to us to-night, and would like to say in connection with this valuable subject on education that I have had considerable to do with the training

of young men for the past fifteen or more years, and it has always been a pleasure to impart any knowledge that I may have had on the subjects of mechanical drawing, geometry, practical mechanics, etc.

Have noticed in a certain number of pupils in the class over which I have had supervision, the yearning for knowledge and these same young men, by close application to study, in many cases hold very good positions to-day.

I particularly remember one case where a young married man came to one of my classes who had a very poor education, indeed was almost illiterate, but by his persevering habits now holds one of the best positions in the United States, in his particular line, so that it goes to show what Mr. Felton has said is correct, in that it depends greatly upon the man himself.

The railroad with which I have been connected for many years certainly pay a great deal of attention to the training of their apprentices, and it is really surprising the results that have been attained by these young men, many of whom are capable of holding premier positions, due to this training.

I was associated with our retired secretary for a number of years, and believe he will have something to say on this subject to-night.

Mr. H. Hulatt::

We have, I am sure, listened with great pleasure to Mr. Felton's address. His subject, from a railroad point of view, is a most important one for us all. We know very often that when a man leaves school and goes to work for a railroad, careful selection as to the department with which he takes service is not always possible. He may, dependent upon as to whether there are vacancies or not, land in the Audit, or in any other department, and once there his future is largely dependent upon his immediate superior — generally, the Chief Clerk.

I think Chief Clerks have a great responsibility, namely, to see that the young men under them are given every possibility to develop and educate themselves. I believe, too, that we who have been fortunate enough to reach the higher ranks in railroading, have a similar responsibility. It was my good fortune when I commenced railroading, not such a number of years ago, to be under a man who

was essentially an educator, and I claim that the position I hold to-day is largely due to him and to all the trouble he went to, to develop my mental faculties and knowledge of my particular branch of railroading.

Railroading is a "specialized" vocation. We are more or less divorced from commercial life, and yet naturally have a great deal to do with firms and men engaged in that field, and I am strongly of opinion that railroad men generally should study the problems of commercial life in all its branches, so that we can get to know the troubles and difficulties of the men we have to do business with, and thereby be in a much better position to give them service. I often feel that if we, and in this I include officers and employees, were better posted on economic principles, finance, etc., many of our labor troubles would not have arisen, and increased efficiency all along the line would have been possible.

By developing the brain so do we develop the creative instinct, which is paramount in man, and if we once become creators by using our brain to develop new methods, new machinery, new means of getting business, not only shall we ourselves benefit but the Railroads—our employers, and in the final analysis—Canada.

Mr. James Powell:

After what our worthy Secretary has said regarding myself, I suppose I have to say something. First of all, I was taken up with the Eskimo pie mentioned by Mr. Felton. It was something new to me. I do not know where you can buy it, but when Mr. Felton spoke about Visions, I had a vision some months ago of an ice cream pie with a crust on. With regard to the paper, Education and its Relation to Efficiency, Mr. Booth mentioned that I had had something to do with the education of young men. In his own particular case, I took him as a young boy, and as Mr. Hulatt said, it is up to the heads of all departments to impart what knowledge they have to those who are coming after them. It has always been my one ambition to impart to the men anything I knew myself, and in my own particular training in Mr. Booth's case, and in many other instances he has recited, I can bear him out. I have taken a great interest in apprenticeship teaching most of my life, some of the older men who have obtained positions and lacked the education to fill them, have come to me and I have taught them, as they found that younger men knew

more than they did, and were afraid of their positions. I have also endeavoured strenuously to impart knowledge to young men. I hold that the Federal and Provincial Governments should do everything possible to encourage young men who are ambitious and striving to obtain technical education and provide easy means of gaining same without hedging it round with restrictions and impediments. I have had the same experience that Mr. Booth mentions. I was at Portland some time ago. A gentleman came to me and said, "How do you do, Mr. Powell." I looked at him but could not think of his name, and he said, "You do not know me, I am so and so. I used to be in your class, and want to thank you for your advice and for what you did for me. I am now in charge of a works here. If it had not been for the instruction and advice you gave me I would not have held this position."

I have always held that it is up to the Government and every official to impart what information they can to their staffs.

Chairman:

There is no question about it. It is the man who has got the education who rises, and I think, like Mr. Powell, that the Government should do something, but as far as we are personally concerned to-night, I think it is up to every man to get out himself if he wants to get anywhere. This is an experience meeting. I have had the experience all through for many years of having men pass through my hands getting bigger salaries than I am. I have always taken the keenest delight and pleasure in imparting everything I know to anyone else if they would listen, but sometimes I find it is hard work to work all day and then to get extra studies at night, but it is the men who do that who get along. I think that since this is an experience meeting, we had better have some more experience. Let us hear from someone in commercial life.

Mr. J. A. Shaw.

Reference of the speaker to constant and continuous study brings me back to my start in electrical work.

I remember when nearing the close of my school life, in common with most boys of that age, I did not have a clear idea as to the vocation that I should follow. From some of the work carried out in school, I had the belief that the electrical branch would be the most interesting. On

consulting a wise old relative he suggested that I had better have a talk with the City Electrician. At that time this position was held by Mr. Badger, a very interesting and talented American gentleman. After stating my errand, Mr. Badger said, "Well, young man, I wish to warn you if you do go in for electrical work you have to make up your mind to be a student all your life. There is no finality, and if you are prepared to stick to your books every spare moment you may expect to make some progress." The kindness of the old gentleman in taking an hour of his busy day to give me to the fullest extent of his power what an engineer must be prepared for and an outline of his own experience, in which he mentioned the delight it was to keep touch with the progress of the times, made a deep impression. After pondering the matter over, I decided that I would take a couple of years at the practical end of electrical work to see it as its worst, and finding the first dose attractive, decided to follow this up with more education by a college course, and I have found that Mr. Badger's warning was very true, that engineering is a continuous gathering of information which, however, has a constant fascination for those whose heart is in the work.

Mr. G. M. Wilson:

Mr. Chairman, I must say that I have never listened to a more interesting talk than the one given by Mr. Felton this evening. There is no doubt that we are all more or less acquainted with the incident of the Queen of Sheba going to visit King Solomon. She came in all her pomp and splendour to listen to the wise words of the world at that time, and was glad to exclaim, "The half has not been told me," but I believe that Mr. Felton has told it all this evening in a nutshell. Thank you.

Mr. R. D. Black:

Ever since Mr. Edison propounded his famous questions, I have been on the look out to ask someone their vision on that subject, and I would like to ask Mr. Felton what he thinks of Mr. Edison's questions as a test of education. I think that probably his views on the subjects should be worked out.

I read those questions very carefully, and took them up with a Committee in New York, of men who are considered to be very well trained and occupy important departmental positions. I wanted to see what their reflex on

them was, and just what they had thought concerning them, and our conclusion was this—that there are some geni in the world, very few, but Edison is one of them, and while we are not challenging Mr. Edison's unapproached position in the world as an inventor; as a man, perhaps the greatest living man to-day from the point of view of the human race, so far as benefit is concerned, the fact still remains that his questions are absolutely impossible. When I say impossible, I mean that whether you could or could not answer them would not be a final test of your fitness nor of your training or ability, although we will grant that if you could answer them you would be considered mighty capable so far as these particular questions are concerned. When I say that there were seven men, it happened that each one of them was a graduate of a different University, and each man had obtained a marked standing in his own field, and that was their conclusion. Since that time these men have discussed the matter with Edison personally, and Edison came back at them and said seriously, "Look, if I have done nothing more than to get you men to think in a straight line about it, about the questions I have propounded, I have accomplished what I set out to accomplish."

Mr. T. C. Chown:

The speaker mentioned during his address that unemployment was wasted energy, and that chief executives were commonly called the armchair officials. Do you not think that unemployment is controlled largely from the armchair.

In Montreal we have a number of large plants who manufacture various commodities, and of course, they have to be sold. There are also smaller companies who manufacture material used by the larger companies. The armchair official of the larger Company issues orders to his superintendent to make reports on the conditions and improvements needed in their departments to cut down cost of operating. When estimates are complete and submitted to the armchair, he looks same over and although improvements will save his company considerable operating expense he will say, No; wait till next year. If we are to use up some of this wasted energy it will be necessary for the larger companies or armchair officials to loosen up on some of this work so that they in turn can reap the benefit by increasing the sales of their products to the smaller consumer and vice versa.

When the armchair officials loosen up, some of this unemployment or so-called wasted energy can be called into use.

Mr. F. McCann:

May I ask the speaker the easiest way of getting co-operation through the armchair executive. I have had an experience which happened within the last three weeks. We got a new executive and I don't know whether the chair was too small or the head too large, but things happened and we are lacking at the present moment a great deal of co-operation. I believe myself that is the most important thing in any corporation. Can you suggest a way to develop that co-operation. Do you think it is the personnel or the experience?

Mr. A. J. Felton:

It is very difficult for me to see why a plant would not operate if it had a market for its product, or if it could see a market ahead of it within a reasonable length of time. Every man knows the danger of creating an inventory of finished product for which there is no immediate market. More business enterprises go on the rocks through an inventory than through a lack of sound financial policy. I mean that any production made has got to be sold within a reasonable length of time. The plant is always in operation when its product is being disposed of. So far as suggestions go from men in the ranks are concerned. We have conducted a long investigation to find out what you can do by way of getting co-operation between the management on the one hand, and the men in the ranks, on the other hand. We have come to the conclusion that it depends on the nature of the industry, but there is one fundamental thing which will work under all circumstances, i.e., the sealed suggestion box. Let me give you our reasons why it will work under any conditions. I was recently in the city of Cleveland, where they have the suggestion box system under a committee. A committee from the workmen, one man from the foremen, one from the superintendents, and one from the management. That box is opened once a month. If you give a suggestion you do not sign your name. You keep a copy of it. It must be typed. You cannot submit it in writing, and you have the duplicate to

prove that it was yours. That is read out aloud at this meeting. They do not know who it is. It may be the President, it also may have come from the office boy or the shipping clerk. That committee decides if it is going to be adopted or tried out, and not until it has been tried out is he paid the bonus for having suggested it, and only after that is its author made known to the other men. I may add that at that meeting there were 37 sealed suggestions, eighteen of which were officially adopted. The best one was submitted by the shipping clerk, age 18, who got the first prize of \$25.00. The third prize was won by the President himself. Now I want to submit to you that the effect of that is worth while. It gives every man the confidence that his ideas will receive an impartial investigation and fair trial, and that he suffers no danger of submitting it to other men, who may in turn forget about it sometimes or incorporate it as their own. That sometimes happens in a plant, but it is very seldom, but there is no chance for that taking place under the sealed suggestion box system, and it will stand the test of time.

Chairman:

Mr. Felton referred to-night to a little article on Government by chief clerks. As it happens, our next paper is going to be on the subject, "The chief clerk, his duties and problems," and we all should be interested.

Mr. Powell:

I think we ought to tender a vote of thanks to Mr. Felton for his interesting paper to-night. I think he has given us his views in a very pleasing manner. I am sure we are all deeply grateful, and I move a vote of thanks.

Mr. G. M. Wilson:

I would like to second that.

Chairman:

Mr. Felton, I have great pleasure in conveying to you the thanks of the meeting, in which I join very heartily.

Refreshments will now be served in the rear of this room.

Meeting adjourned.

ANNUAL BANQUET.

The Nineteenth Annual Banquet was held in the Rose Room of the Windsor Hotel on Saturday evening, January 28th, 1922, and was attended by three hundred guests, including leading railway and supply men from different parts of the Continent.

The room was tastefully decorated, a notable feature being a miniature electric engine and train winding its way through tunnels, etc., arranged on one of the principal tables.

Mr. Wm. F. Tye, ex-Chief Engineer of the Canadian Pacific Railway, in replying to the toast of "The Railways," dealt at length with the railway problem confronting Canada, especially regarding the doubling and triplicating of railway services, and made criticisms, as an expert railway engineer.

Mr. Tye expressed the opinion that the present Government would imitate the course of the late Sir John A. Macdonald, the greatest constructive statesman Canada ever had, and would, in a few years, when such a thing was possible, turn the National Railways over to a private company. Then if such a company would ruthlessly cut away the dead-wood, use every possible economy; not spend a single dollar until justified, and then spend freely; and if the Railway Commission would remember that the freight rates on this continent were the lowest in the world, and would refrain from clubbing the company over the head with unjustifiably low rates every time it started to get its head above water, the road would in the course of time prove successful. But, under the best conditions, Mr. Tye opined, this desirable end would take some time, as there had been too many mistakes made in the past to permit of immediate successful results.

Mr. Tye pointed out that the margin of success of even the most successful railroad was very narrow, and that such success could not be attained under Government operation, as the political atmosphere was not a good one in which to develop railways successfully.

Deficit of \$230,000,000.

He pointed out that over 50 per cent of our railways

had become bankrupt, while their operation for the past three years by the Government had resulted in a deficit of \$230,000,000 if interest on the cost of the Government controlled roads at 4 per cent were included.

This deplorable condition, said Mr. Tye, was, in his opinion, due to a misconception on the part of the Government as to the actual railway requirements of the Dominion, and, on the part of the builders, as to the actual character of the railways needed. Successive governments had given, firstly, huge gifts of money, then lands, and later on had guaranteed bonds of practically any railway which asked such assistance. This had led to a debauch of railway construction that had given Canada a railway mileage far in excess of its requirements.

Canada, with a population of about eight and a half millions, had a greater railway mileage than European countries with populations from five to ten times greater, while the Dominion had twice as much railway mileage per capita as the United States.

Mr. Tye also said there was a popular belief that all railways were great money makers. He pointed out that in 1919 the total amount paid out in interest and funded debt, dividends, etc., amounted to only 3 per cent of the total capitalization of the Canadian railways. While the C. P. R. had always been held forth as an example in this connection, the fact was that the 10 per cent dividend paid by that company really only represented $5\frac{3}{4}$ per cent on the money investment in the road, which could not be considered too high for the most progressive railway on the continent, after 40 years of struggling.

Future Outlook.

Looking to the future, Mr. Tye stated that notwithstanding the large deficits, the duplication and triplication of lines, with three transcontinental lines where two would have a hard struggle to make both ends meet, he felt that a way could be found out of the present difficulties, especially when he thought of how the C.P.R. was built through what was practically a wilderness, producing no traffic, and had developed into the most successful railway on the continent. And also because of the fact that the National railways, including the Grand Trunk had in 1920 a per mile traffic of \$9,500, while it was not until 1911 that the C.P.R. exceeded this mark.

Prof. B. K. Sandwell.

Prof. B. K. Sandwell, replying to the toast of "Our Guests," said that having learned that his predecessor at the Club's last banquet, was his own department head, Dr. Stephen Leacock, he was forced to conclude that the club had an intense interest in economics, and he would therefore devote his time to a study of some serious economic problems affecting the transportation industry.

This Mr. Sandwell failed to do, to the evident relief of the audience, but at the close of a humorous address he did make a serious protest against what he described as some fundamental errors of current taxation policy. The prevalent practice of taxing the transportation industry, Mr. Sandwell described as penalizing production at its most sensitive point. Cheap transportation, and that alone, was responsible for the vast enlargement of the sphere of production, the spreading of productive activities further and further away from the producer, in the last two generations; and anything that made transportation dearer than it need be meant a curtailment of competition, and a driving out of those competitors who were producing at the best advantage and therefore exerting the most influence for the reduction of prices.

"Governments in their taxation policy," said Mr. Sandwell, "remind me of my cat. When I first got her, there was a fine supply of mice around the house, which with proper conservation would have furnished her with food for years, but instead of being reasonable about them she simply fell to and devoured every mouse that showed its head, with the result that after two or three weeks she was coming and begging for food. Governments which lie in wait and devour a profit every time they see one are doing just what that cat did, and will have just the same effect on the sources from which they ought to derive their living." In conclusion Mr. Sandwell urged his hearers to use their influence in favor of a policy which would throw the burden of taxation as much as possible on consumption rather than on production, and pointed out that in no country in the world was a tax on transportation more detrimental than in Canada, whose producers were probably as far as railway distance was concerned than those of any other country.

Lt.-Col. Paul Hanson.

Lt.-Col. Paul Hanson replied to the toast of "The Railway Supply Men" in happy vein, asking the railways to co-operate with the supply men in the rehabilitation of the business of the country by becoming dispellers of gloom and dispensers of optimism and orders.

The chair was occupied by Mr. Arthur Crumpton, president of the Railway Club, and others at the table of honor, in addition to the speakers, included Messrs. Wm. McNab, W. H. Winterrowd, L. Joubert, Chambre de Commerce; Maxwell Murdock, Dominion Commercial Travellers' Association; W. A. Taylor, and Percy Clarkson, Kiwanis Club; Frank Barbey, A. J. Connolly and R. D. FitzMaurice, of the New England Railway Club, Boston; E. E. Lloyd, G. M. Wilson, J. Coleman, R. M. Hannaford, J. Hendry, W. A. Booth and C. P. Reynolds.

An excellent amusement programme was given under the direction of the secretary and Mr. Norman Holland.

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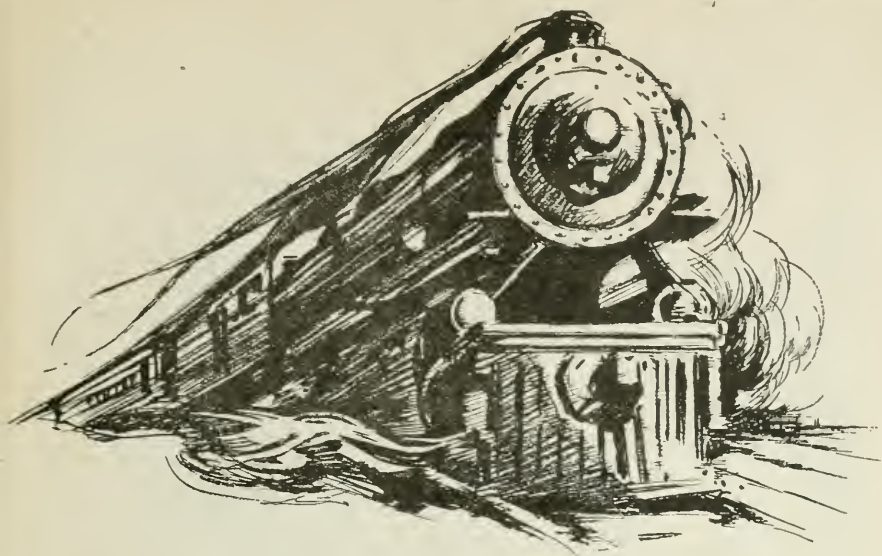
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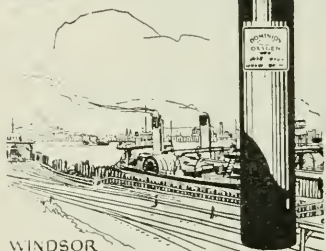
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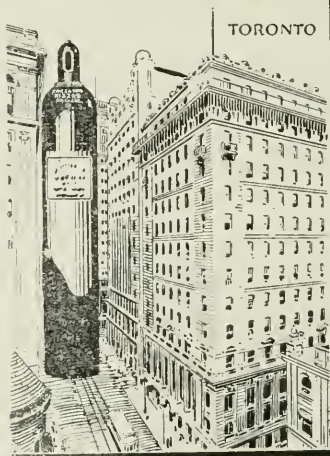
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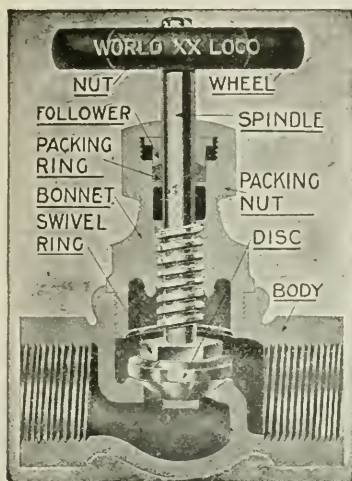
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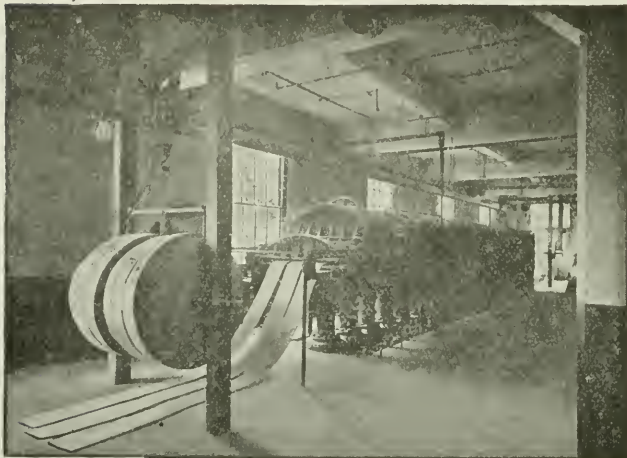
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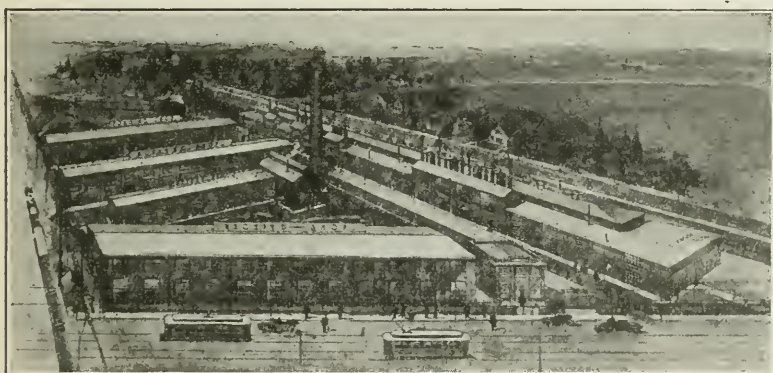
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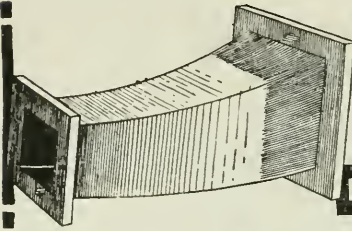
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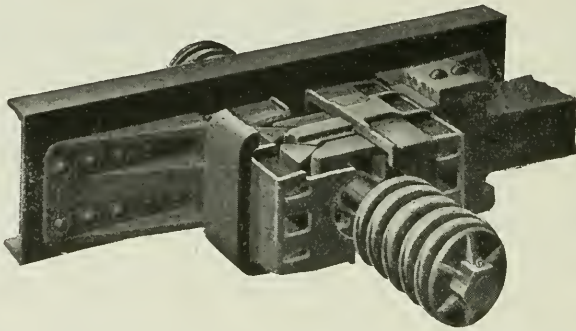
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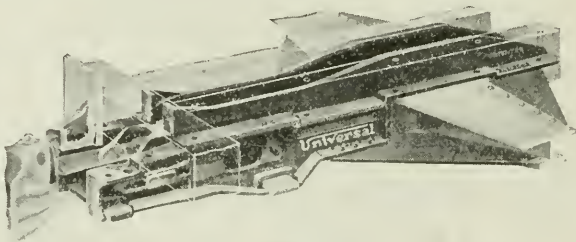
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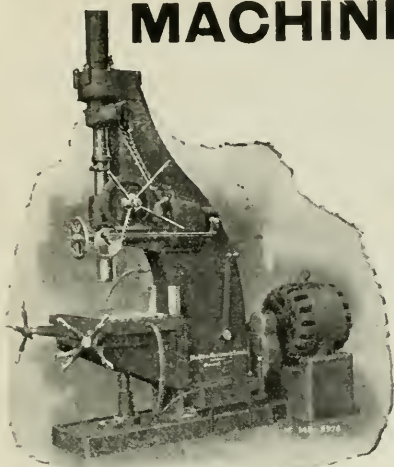


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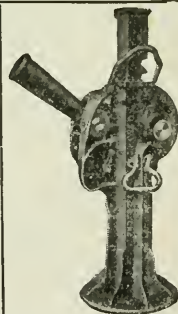
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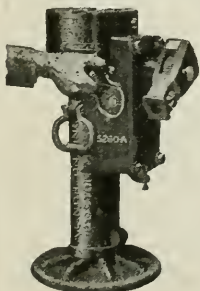
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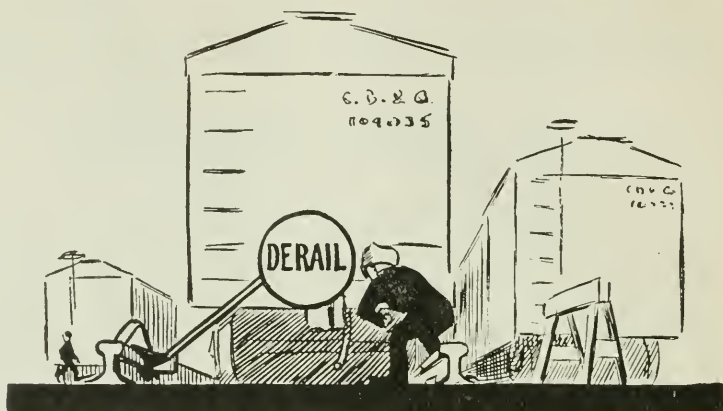
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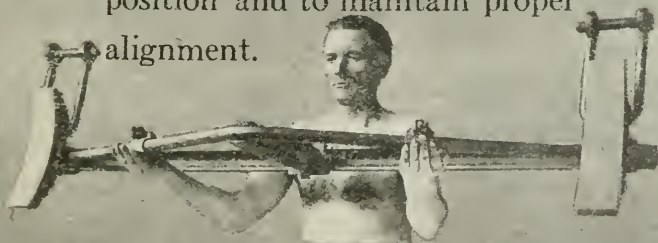
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